ABSTRACT OF THE DISCLOSURE

A catheter system is provided for use in sclerotherapy of varicose veins. The catheter system comprises a multi-lumen tube, a tip device and a fluid porting device. The multi-lumen tube comprises a coaxial center lumen and three equally spaced outer lumens in the annulus between the central lumen and the outer wall of the multi-lumen tube. The multi-lumen tube is used for carrying sclerosing agent and irrigation fluid and for providing suction at the affected site in the vein. The catheter device is introduced inside the vein and the tip device is positioned at the affected site. Pressure is applied over the affected vein using a pressure applying device. The catheter device is slowly withdrawn while continuously releasing the sclerosing agent from the tip device. This helps in achieving uniform sclerosis of the affected vein.